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Patent Claims

1. A method for removing at least one partial area, in particular a layer area, of a component made of metal and/or at least one metal compound, in which the partial area is removed by an acid treatment or a mechanical treatment, a diffusion agent (16) made up of at least two components diffusing at least into the partial area (28) of the component (1) in an intermediate step, at least two components of the diffusion agent (16) which diffuse into the component (1) being metallic,
in which at least one component of the diffusion agent (16) diffuses into the component (1) directly from the gas phase.

2. The method as claimed in claim 1, characterized in that at least one component of the diffusion agent (16) is metallic.

3. The method as claimed in claim 1, characterized in that one component of the diffusion agent (16) is formed from aluminum.

4. The method as claimed in claim 1, characterized in that one component of the diffusion agent (16) is formed from cobalt.

5. The method as claimed in claim 1, characterized in that the two-component diffusion agent (16) consists of cobalt and aluminum.

6. The method as claimed in claim 1, characterized in that the diffusion agent (16) is applied to a surface (13) of the component (1).

7. The method as claimed in claim 6, characterized in that the diffusion agent (16) is applied by plasma spraying.

8. The method as claimed in claim 6, characterized in that the diffusion agent (16) is applied by evaporation coating.

9. The method as claimed in claim 6, characterized in that the diffusion agent (16) is applied by CVD (chemical vapor deposition).

10. The method as claimed in claim 6, characterized in that

the diffusion agent (16) is applied by a pack method.

11. The method as claimed in claim 1, characterized in that the diffusion effects at least one phase change in the component (1) or partial area (28).

12. The method as claimed in claim 1, characterized in that the partial area (28) is an MCrAlY layer (10), where M stands for an element iron, cobalt or nickel.